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## SOME SUGGESTIONS ON THE CONSTRUCTION OF BIRD HOUSES

*By*

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The Purple Martin usually arrives in the Chicago region during the third week in April, but occasionally he comes much earlier. It is well to have your house ready for him by the end of the second week to shelter the early visitors in the advent of severe weather.

In the spring of 1905 the writer had finished a ten room house and for lack of time, tossed it upon the roof of a shed, intending to place the house upon a pole at the first leisure moment. Returning home about five o'clock in the evening during an April storm of rain and sleet, he was astonished to behold thirty-two martins sitting upon the telephone wires, apparently attracted by the new bird house lying upon the shed. Several passing teamsters noticed the pitiable condition of the freezing birds and offered to raise the house for them. Tools were quickly brought, and in a few minutes the united efforts of the rough but kindly workmen had swung into place the heavy pole, with its handsome bird home at the top. While the last brace was being spiked to the shed, the birds seeming to know that the house was especially for them, darted eagerly into the dripping shelter, all crowding into three or four of the leeward rooms for warmth. Wholly unafraid of the men on the roof, their twitterings of contentment could be distinctly heard, and all felt that a deed of genuine kindness had been accomplished.

Ten pairs of birds arrived later and occupied the house. The colony seemed a success until a distressingly sultry day came in July resulting in the death of ten little birds. The house was then generously perforated with quarter inch holes and has proved a successful bird home in subsequent years.

The following observations on the construction of martin houses are made after years of observation of the habits of the birds, and it is believed that if the directions are followed a colony may be established in almost any locality:

The houses may be made in any design that suits the fancy and skill of the maker. Houses may be had of professional builders, ready for erection, and beautifully constructed, but there is a peculiar pleasure in building a house after one's own design.

A few fundamental rules should be observed to make the house a success, after which the designer may let his fancy have full play. The primary object should be to protect the very early arrivals from the sleet and snow, and cold rain, and later to shelter the nestlings from the excessive heat that is sure to come in the latter part of June and the first week of July. To meet these essentials it is necessary to have a tight roof, wide eaves, and ventilation sufficient to prevent smothering.

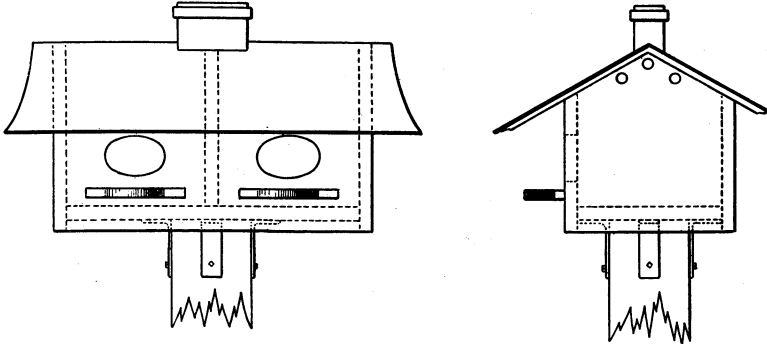
The martin measures  $7\frac{1}{2}$  inches in length and  $15\frac{1}{2}$  inches in wing extent, so that more room should be provided than is generally thought necessary. Four young are usually produced, and these with the parent birds require an apartment not smaller than 7 inches by 7 inches by 6 inches with some arrangement for moderate ventilation. The prime object is of course to produce *healthy fledgelings*, otherwise the finest bird palace is a flat failure.

The openings are made in various shapes and sizes, but the best results are obtained when the doors are cut in the form of an ellipse, and placed with the lower part of the opening  $1\frac{1}{2}$  inches above the floor. They should be approximately 2 inches high and 3 inches wide to accommodate the long wings of the parent birds, and also to afford an opportunity for the fledgelings to get to the air in stifling weather. The best lumber to use for this purpose is clear poplar  $\frac{5}{8}$  inch for the sides and  $\frac{1}{2}$  inch for the partitions. The bottom of the house should be made of  $\frac{3}{4}$  inch or  $\frac{7}{8}$  inch poplar, and raised  $\frac{1}{8}$  inch above the lower edges of the sides to prevent the water from penetrating at the floor level. The joints of the roof should be tinned with 2 inch strip to keep out the beating rains, as it is impossible to prevent the expansion of the roof boards.

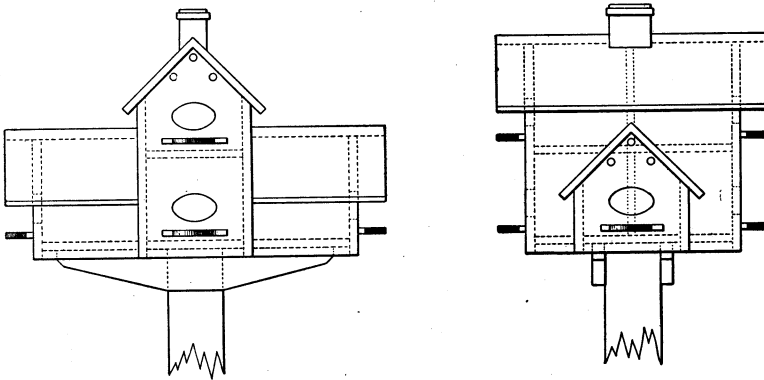
A clean pine pole 4 inches by 4 inches by 18 feet is the best cheap device for elevating the house. It must be placed out in the sunlight and away from the trees. The pole should be secured in such a way that it may be raised and lowered when necessary. A simple plan is to plant two 4 inch by 4 inch by 8 foot poles permanently in the ground, placing them 4 inches apart, and extending four feet above the ground. The long pole may then be erected between them, and held securely in an upright position by means of four cleats screwed on opposite sides, at the top and bottom of the upright braces. Houses weighing sixty pounds or less are readily fastened to the pole by means of four small angle-irons.

Houses should be painted each year before they are put out. The best color seems to be white with a trim of green, olive or red. This is a matter of taste, however. The houses should be taken down in September, cleaned out and stored until the next season.

Martins are sociable in their habits and immense colonies may be developed. This is not desirable, however, because of the noise, and the fatalities that must occur among a multitude of birds for lack of food. It is better to have one hundred colonies of five families each scattered over a wide territory than to have five groups of one hundred families each, located in one community.

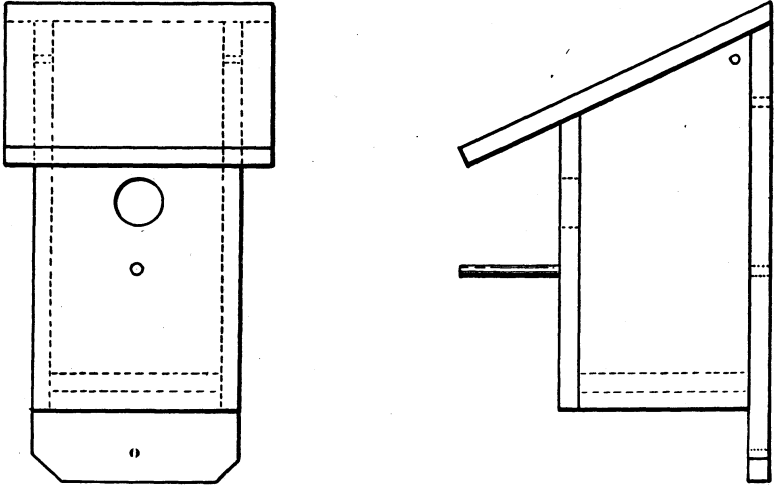


This cut represents the simplest form of a house for two families. The wide eaves afford shelter in hot weather, while the solid back gives ample protection in season of chilling winds and late snows. The house should face the south or the east.



This design is intended for a colony of six families. The house is easy of construction, and is a combination of the units described above. Such a house upon a lawn in Rogers Park produced ninety-six full fledged young birds in four seasons. During the cold north-east storms from the lake in early spring, the birds crowd into one or two compartments on the leeward side of the house and manage to survive.

It should be remembered that sparrows, cats and squirrels are persistent enemies of the purple martin. There must be no trifling with these creatures. They must be killed or driven away to prevent disappointment and loss of your birds. But should you succeed in establishing a colony of martins you will find them a source of constant pleasure from April to the middle of August, and you will look forward with keenest anticipation to their return from the tropics each season.



This design may be used in building either a home for the house wren or for the blue bird. When intended for the wren the interior should measure three and one-half inches square, and seven inches high at the back. The opening should be one inch. When intended for the blue bird the dimensions should be doubled, and they will be found just to his liking. The wren is very friendly, and his domicile may be located near your own and in the vicinity of a bush or tree to give him shelter when pursued by the sparrows. The blue bird is more solitary and not the least afraid of sparrows. His house is best placed upon a pole about twelve feet above the ground in the open, or among fruit trees.

### THE CHICAGO ACADEMY OF SCIENCES

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